

**EXHIBIT A**  
**THE PARTIES' LOCAL PATENT RULE 4-3 JOINT CLAIM CONSTRUCTION CHART**

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
1	<b>"irregular pattern"</b>  ('976 Patent claims 1, 10, and 17)	<u><b>Impulse's Proposed Construction:</b></u>  No construction necessary.	<u><b>DWS's Proposed Construction:</b></u>  Arrhythmic pattern designed not to repeat within consecutive cycles of the rotor
		<u><b>Intrinsic Evidence:</b></u>  '976 Patent at Abstract, 2:2-6, 2:25-31, 2:32-41, 2:46-50, 3:53-60, 3:61-4:7, 4:20-25, 4:54-57, 6:4-36, 6:37-67, 7:1-41, Figs. 1-7.	<u><b>Intrinsic Evidence:</b></u>  '976 Patent at: Field (57); Fig. 4; Figs. 6-7; 1:62-2:31; 4:26-49; 5:1-23; 6:37-67; 7:1-65; Claims 1, 5, 10, 14, 17; IDT-DWS-0002839-51; IDT-DWS-002968-92.
		<u><b>Extrinsic Evidence:</b></u>  Reserve the right to address and use any extrinsic evidence put forth by DWS.	<u><b>Extrinsic Evidence:</b></u>  IDT-DWS-002106-25; IDT-DWS-001443-2007; IDT-DWS-002719-32; IDT-DWS-002491-691; IDT-DWS-001409-27; IDT-DWS-000985-1351; IDT-DWS-000929-49; IDT-DWS-000115-468; Noynaert Testimony.  DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
2	<p><b>“a pattern in which an orientation of the flow head at a defined position in a cycle of the rotor is different between consecutive cycles of the rotor”</b></p> <p>(’976 Patent claims 1, 10, and 17)</p>	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary; not indefinite.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>Indefinite.</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>Same citations as “irregular pattern”.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’976 Patent at: Field (57); Fig. 4; Figs. 6–7; 1:62–2:31; 4:26–49; 5:1–23; 6:37–67; 7:1–65; Claims 1–17, 19, 20; IDT-DWS-0002839–51; IDT-DWS-002968–92.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Testimony from Dr. Harri Kytomaa</p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
3	<p><b>“ports”</b></p> <p>(’976 Patent claims 1, 2, 10, 11, and 17)</p> <p>(’584 Patent claims 1, 26, 30, 33, and 36)</p>	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>holes, other than a central bore, extending therethrough</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’976 Patent at Abstract, 1:62-2:31, 3:61-4:7, 4:26-49, 4:63-5:22, 5:38-61, 6:4-36, 6:37-67, 7:1-41, Figs. 3-7.</p> <p>’584 Patent at Abstract, 2:17-33, 2:42-53, 2:64-3:16, 3:25-35, 3:51-65, 3:66-4:4, 6:11-25, 6:31-41, 6:52-65, 7:6-35, 7:55-8:3, 8:4-31, 8:33-65, 8:66-9:22, 9:40-64, 11:36-62, 11:63-12:19, Figs. 3, 4, 5, 6, 7, 8A, 8B.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’976 Patent at: Field (57); Figs. 3–7; 1:62–2:31; 3:61–4:49; 4:58–5:61; 6:4–67; 7:1–65; Claims 1, 2, 4, 5, 8–11, 13–15, 17, 19, 20; IDT-DWS-0002839–51; IDT-DWS-002968–92.</p> <p>’584 Patent at: Field (57); Figs. 3–14; 2:17–63; 2:64–67; 3:1–4:16; 6:11–12:19; Claims 1, 5–8, 12, 16, 20–23, 25, 26, 30, 33, 36, 38, 39; IDT-DWS-003569–77; IDT-DWS-004144–80; IDT-DWS-004204–86; IDT-DWS-004310–91.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
		<p style="text-align: center;"><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p style="text-align: center;"><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468.</p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
4	<p><b>“passages”</b></p> <p>(’337 Patent claim 1)</p> <p>(’265 Patent claims 1, and 10)</p>	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>holes, other than a central bore, extending therethrough</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’337 Patent at 10:26-41, 10:42-53, 10:54-11:2, 11:3-32, 11:33-49, Figs. 9A-13;</p> <p>’265 Patent at 10:40-51, 11:13-27, 12:37-48, Figs. 9A-13.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’337 Patent at: Field (57); Figs. 6A–6B; Figs. 7A–7B; Figs. 9A–9D; Figs. 11A–11B; 6:61–7:40; 7:54–8:42; 9:42–63; 9:64–10:25; 11:33–49; 13:11–61; Claims 1–4, 8; IDT-DWS-001016–56; IDT-DWS-001127–83.</p> <p>’265 Patent at: Field (57); Figs. 6A–B; Figs. 9–15; 6:58–8:24; 8:25–13:59; Claims 1, 3–5, 8–10, 13, 18, 19; IDT-DWS-000191–225; IDT-DWS-000246–270.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
		<p style="text-align: center;"><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p style="text-align: center;"><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277-88; IDT-DWS-002818-3193; IDT-DWS-002106-25; IDT-DWS-001443-2007; IDT-DWS-002719-32; IDT-DWS-002491-691; IDT-DWS-000929-49; IDT-DWS-000115-468.</p> <p>IDT-DWS-003277-88; IDT-DWS-002818-3193; IDT-DWS-002106-25; IDT-DWS-001443-2007; IDT-DWS-002719-32; IDT-DWS-002491-691; IDT-DWS-001409-27; IDT-DWS-000985-1351.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
5	<b>“central passage”</b>  ('337 Patent claims 1, 3, 4, and 8)  ('265 Patent claims 1, 3, 5, 10, and 19)	<b><u>Impulse's Proposed Construction:</u></b>  No construction necessary.	<b><u>DWS's Proposed Construction:</u></b>  central bore
		<b><u>Intrinsic Evidence:</u></b>  '337 Patent at 6:33-40, 7:24-26, 8:9-26, 8:27-42, 9:13-21, 9:44-63, Figs. 1-9D, 11A, 11B;  '265 Patent at 7:21-23, 7:51-57, 8:6-24, 8:25-29, 9:12-32, 9:46-58, 10:3-8, 11:59-67, 12:12-15, Figs. 6A-13.	<b><u>Intrinsic Evidence:</u></b>  '337 Patent at: Field (57); Figs. 6A–6B; Figs. 7A– 7B; Figs. 9A–9D; Figs. 11A–11B; 6:61–7:40; 7:54–8:42; 9:42–63; 9:64–10:25; 11:33–49; 13:11– 61; Claims 1–4, 8; IDT-DWS-001016–56; IDT-DWS-001127–83.  '265 Patent at: Field (57); Figs. 6A–B; Figs. 9–15; 6:58–8:24; 8:25–13:59; Claims 1, 3–5, 8–10, 13, 18, 19; IDT-DWS-000191–225; IDT-DWS-000246–270.

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
		<p style="text-align: center;"><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p style="text-align: center;"><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-000929–49; IDT-DWS-000115–468.</p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>



No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
6	“passage”  (’265 Patent claim 10)	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>central bore</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’265 Patent at 7:21-23, 7:51-57, 8:6-24, 8:25-29, 9:12-32, 9:46-58, 10:3-8, 11:59-67, 12:12-15, Figs. 6A-13.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’265 Patent at: Field (57); Figs. 6A–B; Figs. 9–15; 6:58–8:24; 8:25–13:59; Claims 1, 3–5, 8–10, 13, 18, 19; IDT-DWS-000191–225; IDT-DWS-000246–270.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
7	<p><b>“eccentric”</b></p> <p>(’976 Patent claims 1, 10, and 17)</p> <p>-and-</p> <p><b>“eccentrically”</b></p> <p>(’976 Patent claims 1, 10, 12, and 16)</p>	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>non-concentric / non-concentrically</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’976 Patent at 2:2-6, 2:25-31, 3:53-60, 3:66-4:7, 4:8-25, 4:50-57, 6:4-36, 6:37-67, 7:1-41, Figs. 1, 2, 7.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’976 Patent at: Field (57); Figs. 1–2; 1:62–2:31; 3:45–60; 4:50–57; 6:4–35; Claims 1, 10, 12, 16, 17, 20; IDT-DWS-0002839–51; IDT-DWS-002968–92.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468; DWS00000903–20.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
8	<p><b>“rotational motion”</b></p> <p>(’584 Patent claims 1, 31, and 36)</p>	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>non-eccentric (concentric) motion</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’584 Patent at 2:16-33, 3:1-17, 4:5-8, 5:41-6:10, 7:6-35, 8:4-31, 9:23-39, 10:9-28, 12:7-19, Figs. 1-14.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’584 Patent at: Field (57); Figs. 1–5; Figs. 8A–B; 2:17–33; 2:57–63; 3:1–16; 3:56–65; 4:5–8; 4:33–54; 5:29–40; 5:58–6:41; 7:6–54; 8:4–65; 8:66–10:8; 10:29–45; Claims 1, 10, 31, 36; IDT-DWS-001590–626; IDT-DWS-003964–91; IDT-DWS-004144–80; IDT-DWS-004204–86; IDT-DWS-004310–91.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Rubicon’s Markman Hearing Transcript at 5:12-21, 8:6-10:17, 11:5-13, 15:14-18:12, 21:12-22:12, 36:9-25, 39:14-41:13.</p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468; DWS00000903–20.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
9	<b>“alignment”</b>  ('976 Patent claims 1, 10, and 17)  ('584 Patent claims 1, 26, and 36)  ('337 Patent claim 1)  ('265 Patent claims 1, and 10)	<u><b>Impulse's Proposed Construction:</b></u>  No construction necessary.	<u><b>DWS's Proposed Construction:</b></u>  orientation permitting fluid flow therethrough
		<u><b>Intrinsic Evidence:</b></u>  '976 Patent at Abstract, 2:20-25, 4:26-38, 5:12-22, 6:4-36, 6:46-55, Figs. 1-7.  '584 Patent at Abstract, 2:17-33, 3:1-16, 3:56-65, 8:16-29, 8:66-9:14, 9:40-56, 9:66-10:3, 11:36-62, 11:63-66, Figs. 4, 5, 6, 7, 8B, 11A, 11B, 12A.  '337 Patent at Abstract, 10:26-53, 11:3-21, 12:31-47, Figs. 9A, 9B, 11A, 11B, 13.  '265 Patent at 10:27-51, 11:1-23, 12:29-45, Figs. 9A, 9B, 11A, 11B, 13.	<u><b>Intrinsic Evidence:</b></u>  '976 Patent at: Field (57); Figs. 3-7; 1:62-2:31; 3:61-4:49; 4:58-5:61; 6:4-67; 7:1-65; Claims 1, 10, 17; IDT-DWS-0002839-51; IDT-DWS-002968-92.  '584 Patent at: Field (57); Figs. 3-14; 2:17-63; 2:64-67; 3:1-4:16; 6:11-12:19; Claims 1, 16, 26, 36; IDT-DWS-003569-77; IDT-DWS-004144-80; IDT-DWS-004204-86; IDT-DWS-004310-91.  '337 Patent at: Field (57); Figs. 6A-6B; Figs. 7A-7B; Figs. 9A-9D; Figs. 11A-11B; 6:61-7:40; 7:54-8:42; 9:42-63; 9:64-10:25; 11:3-49; 12:27-60; 13:11-61; Claims 1, 2; IDT-DWS-001016-56; IDT-DWS-001127-83.  '265 Patent at: Field (57); Figs. 6A-B; Figs. 9-15; 8:25-14:51; Claims 1, 4, 8, 10, 18; IDT-DWS-000191-225; IDT-DWS-000246-270.

		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Rubicon’s Markman Hearing Transcript at 79:5-8.</p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468; IDT-DWS-004540–48.</p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468; IDT-DWS-004540–48.</p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-004540–48.</p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-000929–49; IDT-DWS-000115–468; IDT-DWS-004540–48.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
10	<p><b>“a plurality of ports having at least two different cross-sectional areas”</b></p> <p>(’976 Patent claim 2)</p>	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>two or more ports comprising at least two different cross sectional areas, measured at the face</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’976 Patent at 1:62-2:31, 2:46-50, 3:61-4:7, 4:26-49, 4:63-5:22, 5:34-61, 6:4-36, 6:37-67, 7:1-41, Figs. 3-7.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’976 Patent at: Field (57); Figs. 3–7; 1:62–2:31; 3:61–4:49; 4:58–5:61; 6:4–67; 7:1–65; Claims 1, 2, 4, 5, 8–11, 13–15, 17, 19, 20; IDT-DWS-0002839–51; IDT-DWS-002968–92.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
11	<p><b>“the plurality of ports including ports of different sizes”</b></p> <p>(’976 Patent claim 10)</p>	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>two or more ports comprising at least two different cross sectional areas, measured at the face</p> <p>alternatively, indefinite</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’976 Patent at 1:62-2:31, 3:61-4:7, 4:26-49, 4:63-5:22, 5:34-61, 6:9-36, 6:37-67, 7:1-41, Figs. 3-7.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’976 Patent at: Field (57); Figs. 3–7; 1:62–2:31; 3:61–4:49; 4:58–5:61; 6:4–67; 7:1–65; Claims 1, 2, 4, 5, 8–11, 13–15, 17, 19, 20; IDT-DWS-0002839–51; IDT-DWS-002968–92.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
12	<p><b>“the plurality of ports in the flow head comprising different sizes and the plurality of ports in the flow restrictor comprising different sizes”</b></p> <p>(’976 Patent claim 17)</p>	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>two or more ports in each of the flow head and the flow restrictor where the ports of the flow head comprise at least two different cross sectional areas, measured at the face, and the ports of the flow restrictor comprise at least two different cross-sectional areas, measured at the face</p> <p>alternatively, indefinite</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’976 Patent at 1:62-2:31, 2:46-50, 3:61-4:7, 4:26-49, 4:63-5:22, 5:34-61, 6:4-36, 6:37-67, 7:1-41, Figs. 3-7.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’976 Patent at: Field (57); Figs. 3–7; 1:62–2:31; 3:61–4:49; 4:58–5:61; 6:4–67; 7:1–65; Claims 1, 2, 4, 5, 8–11, 13–15, 17, 19, 20; IDT-DWS-0002839–51; IDT-DWS-002968–92.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>



No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
13	<p><b>“the at least two different sizes of the flow restrictor ports being different than the sizes of the flow head ports”</b></p> <p>(’584 Patent claim 30)</p>	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>the two or more cross sectional areas of the ports of the flow restrictor, measured at the face of the flow restrictor, are different than the two or more cross sectional areas of the ports of the flow head, measured at the face of the flow head</p> <p>alternatively, indefinite</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’584 Patent at 3:1-16, 3:51-65, 3:66-4:4, 6:11-25, 6:31-41, 6:62-65, 7:6-35, 7:42-51, 7:67-8:3, 8:4-31, 8:33-65, 8:66-9:22, 9:40-64, 11:36-62, 11:63-12:19, Figs. 4-14.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’584 Patent at: Field (57); Figs. 1–14; 2:42–53; 3:1–5:3; 5:58–9:22; 9:23–11:10; 12:6–34; Claims 5, 6, 16, 20, 26, 30, 38, 39; IDT-DWS-003569–77; IDT-DWS-004144–80; IDT-DWS-004204–86; IDT-DWS-004310–91.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
14	<p><b>“a number of ports of at least two different sizes”</b></p> <p>(’584 Patent claim 30)</p>	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>a first number of ports comprising at least two different cross sectional areas, measured at the face</p> <p>alternatively, indefinite</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’584 Patent at 3:1-16, 3:51-65, 3:66-4:4, 6:11-25, 6:31-41, 6:62-65, 7:6-35, 7:42-51, 7:67-8:3, 8:4-31, 8:33-65, 8:66-9:22, 9:40-64, 11:36-62, 11:63-12:19, Figs. 4-14.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’584 Patent at: Field (57); Figs. 1–14; 2:42–53; 3:1–5:3; 5:58–9:22; 9:23–11:10; 12:6–34; Claims 16, 20, 26, 30; IDT-DWS-003569–77; IDT-DWS-004144–80; IDT-DWS-004204–86; IDT-DWS-004310–91.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
15	<p><b>“a different number of ports of at least two different sizes”</b></p> <p>(’584 Patent claim 30)</p>	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>a second number, different from the first number, of ports comprising at least two different cross sectional areas, measured at the face</p> <p>alternatively, indefinite</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’584 Patent at 3:1-16, 3:51-65, 3:66-4:4, 6:11-25, 6:31-41, 6:62-65, 7:6-35, 7:42-51, 7:67-8:3, 8:4-31, 8:33-65, 8:66-9:22, 9:40-64, 11:36-62, 11:63-12:19, Figs. 4-14.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’584 Patent at: Field (57); Figs. 1–14; 2:42–53; 3:1–5:3; 5:58–9:22; 9:23–11:10; 12:6–34; Claims 16, 20, 26, 30; IDT-DWS-003569–77; IDT-DWS-004144–80; IDT-DWS-004204–86; IDT-DWS-004310–91.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
16	<p><b>“a cyclic, polyrhythmic pattern”</b></p> <p>(’584 Patent claims 1, 26, and 36)</p>	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>a pattern of: two or more different rhythms within one revolution of the flowhead wherein a rhythm refers to either varying amplitude or duration between pressure peaks.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>a designed pattern of: two or more different rhythms within one revolution of the flow head wherein a rhythm refers to either varying amplitude or duration between pressure peaks</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’584 Patent at Abstract, 2:11-41, 3:45-55, 7:6-35, 8:4-31, 8:32-65, 8:66-9:22, 9:31-39, 9:40-10:8, 10:9-28, 10:46-11:10, 12:7-19, Figs. 1-14.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’584 Patent at: Field (57); Figs. 4–14; 2:17–63; 3:1–65; 7:6–54; 8:4–9:22; 9:40–11:10; 11:19–12:19; Claims 1, 16, 26, 36; IDT-DWS-003569–77; IDT-DWS-004144–80; IDT-DWS-004204–86; IDT-DWS-004310–91.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Rubicon’s Markman Hearing Transcript at 3:14-4:4, 3:14-4:4, 7:23-12:21, 12:22-14:12, 15:14-16:12, 19:5-21:9, 36:9-25, 48:2-18.</p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468; DWS00000816–902; Noynaert Testimony.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
17	“constrained to”  (’584 Patent claims 1, 31, and 36)	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>limited to</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’584 Patent at Abstract, 5:41-6:10, 6:11-25, 7:6-35, 8:4-31, 9:23-39, 10:9-28, 12:7-19, Figs. 5-14.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’584 Patent at: Field (57); Figs. 1–14; 2:17–63; 3:1–16; 4:5–8; 5:58–6:41; 9:23–39; Claims 1, 16, 31, 36; IDT-DWS-003569–77; IDT-DWS-004144–80; IDT-DWS-004204–86; IDT-DWS-004310–91.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468; DWS00000903–20.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
18	“substantially stopped”  (’584 Patent claims 27, and 33)	<p align="center"><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary; not indefinite.</p>	<p align="center"><b><u>DWS’s Proposed Construction:</u></b></p> <p>Indefinite.</p>
		<p align="center"><b><u>Intrinsic Evidence:</u></b></p> <p>’584 Patent at 2:17-41, 3:51-55, 8:32-65, 8:66-9:22, 9:40-65, 10:29-45, 11:36-12:5, Figs. 5-14.</p>	<p align="center"><b><u>Intrinsic Evidence:</u></b></p> <p>’584 Patent at: Field (57); Figs. 4–14; 2:34–51; 3:17–24; 3:51–65; 4:9–11; 5:58–6:10; 7:6–35; 8:4–9:22; 9:40–65; 10:46–12:5; Claims 4, 19, 27, 33; IDT-DWS-003569–77; IDT-DWS-004144–80; IDT-DWS-004204–86; IDT-DWS-004310–91.</p>
		<p align="center"><b><u>Extrinsic Evidence:</u></b></p> <p>Testimony from Dr. Harri Kytomaa</p> <p>Rubicon’s Markman Hearing Transcript at 80:11-18</p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p align="center"><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468; IDT-DWS-004540–48; IDT-DWS-004528–36; Noynaert Testimony.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
19	“substantially blocked”  (’584 Patent claim 4)	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary; not indefinite.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>Indefinite.</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’584 Patent at 2:17-41, 3:51-55, 8:32-65, 8:66-9:22, 9:40-65, 10:29-45, 11:36-12:5, Figs. 5-14.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’584 Patent at: Field (57); Figs. 4–14; 2:34–51; 3:17–24; 3:51–65; 4:9–11; 5:58–6:10; 7:6–35; 8:4–9:22; 9:40–65; 10:46–12:5; Claims 4, 19, 27, 33; IDT-DWS-003569–77; IDT-DWS-004144–80; IDT-DWS-004204–86; IDT-DWS-004310–91.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Rubicon’s Markman Hearing Transcript at 80:11-18.</p> <p>Testimony from Dr. Harri Kytomaa</p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468; IDT-DWS-004540–48; IDT-DWS-004528–36; Noynaert Testimony.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
20	“substantially blocking”  (’265 Patent claim 10)	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary; not indefinite.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>Indefinite.</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’265 Patent at 7:38-50, 8:35-40, 8:51-58, 8:61-9:3, 10:3-23, 11:59-12:6, 12:25-58, Figs. 6A-13.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’265 Patent at: Field (57); Figs. 1–15; 2:33–58; 6:58–7:6; 7:51–8:24; 9:62–12:58; Claims 2, 10–13; IDT-DWS-000191–225; IDT-DWS-000246–270.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Testimony from Dr. Harri Kytomaa</p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-004540–48; IDT-DWS-004528–36; Noynaert Testimony.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>



No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
21	<b>“by means of an inverter sub”</b> ('584 Patent claim 34)	<p align="center"><b><u>Impulse's Proposed Construction:</u></b></p> <p>Subject to 35 U.S.C. § 112, ¶6</p> <p>Function: “to induce a variation in pressure in the drilling string corresponding to a variation in flow of the drilling fluid.”</p> <p>Structure: a housing and a shock absorbing and releasing assembly, such as a mechanical spring assembly, and equivalents thereof. "</p>	<p align="center"><b><u>DWS's Proposed Construction:</u></b></p> <p>Subject to 35 U.S.C. § 112(f)</p> <p>Function: inducing a variation in pressure in the drilling string corresponding to a variation in flow of the drilling fluid</p> <p>Structure: an inverter system imparting an axial movement to a mandrel</p>
		<p align="center"><b><u>Intrinsic Evidence:</u></b></p> <p>'584 Patent at 4:16-31, 4:32-54, 4:55-5:3, 5:4-15, 5:29-40, 6:42-51, 9:23-39, Figs. 4-14.</p>	<p align="center"><b><u>Intrinsic Evidence:</u></b></p> <p>'584 Patent at: Field (57); Figs. 1–14; 2:34–63; 4:5–6:51; 9:23–39; Claims 11, 35; IDT-DWS-003569–77; IDT-DWS-004144–80; IDT-DWS-004204–86; IDT-DWS-004310–91.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
		<p style="text-align: center;"><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p style="text-align: center;"><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468; IDT-DWS-004540–48; IDT-DWS-004528–36; IDT-DWS-004489–95.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
22	<p><b>“the receiving end is substantially funnel-shaped and comprises at least one aperture permitting drilling fluid flow from an interior of the receiving end to an exterior of the catch component”</b></p> <p>(’920 Patent claims 1, and 7)</p>	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary; not indefinite.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>Indefinite.</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’920 Patent at 4:14-27, Figs. 1-7, 9, 10.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’920 Patent at: Field (57); Figs. 1–10; 3:33–5:31; Claims 1, 7, 13; IDT-DWS-002510–684.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Testimony from Dr. Harri Kytomaa</p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-000929–49; IDT-DWS-000115–468; IDT-DWS-004540–48; IDT-DWS-004528–36; IDT-DWS-004489–95; DWS00000903–20; Noynaert Testimony.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
23	<p><b>“the assembly”</b></p> <p>(’337 Patent claims 1, and 3-6)</p>	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary; not indefinite.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>Indefinite.</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’337 Patent at 5:34-6:10, 6:33-40, 6:61-7:9, 7:24-26, 8:9-26, 8:27-42, 9:13-21, 9:44-63, 13:11-32, Figs. 1-9D, 11A, 11B.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’337 Patent at: Field (57); Figs. 3–4; Figs. 6A–B; Figs. 7A–B; Figs. 9A–D; Figs. 10A–B; Figs. 12–15; 1:19–21; 1:32–50; 4:36–5:12; 5:13–46; 5:47–6:10; 6:41–7:9; 7:10–8:8; 8:27–60; 9:6–11:2; 11:3–12:13; 12:14–60; 13:11–14:37; 14:38–15:12; 15:13–62; Claims 1–8; IDT-DWS-001016–56; IDT-DWS-001127–83.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Testimony from Dr. Harri Kytomaa</p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-000929–49; IDT-DWS-000115–468; Noynaert Testimony.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
24	<p><b>“assemblies” and “the assemblies”</b></p> <p>(’337 Patent claims 7, and 8)</p>	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary; not indefinite.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>Indefinite.</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’337 Patent at 5:34-6:10, 6:33-40, 6:61-7:9, 7:24-26, 8:9-26, 8:27-42, 9:13-21, 9:44-63, 13:11-32, Figs. 1-9D, 11A, 11B.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’337 Patent at: Field (57); Figs. 3–4; Figs. 6A–B; Figs. 7A–B; Figs. 9A–D; Figs. 10A–B; Figs. 12–15; 1:19–21; 1:32–50; 4:36–5:12; 5:13–46; 5:47–6:10; 6:41–7:9; 7:10–8:8; 8:27–60; 9:6–11:2; 11:3–12:13; 12:14–60; 13:11–14:37; 14:38–15:12; 15:13–62; Claims 1–8; IDT-DWS-001016–56; IDT-DWS-001127–83.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Testimony from Dr. Harri Kytomaa</p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-000929–49; IDT-DWS-000115–468; Noynaert Testimony.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
25	"each assembly" (’337 Patent claim 8)	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary; not indefinite.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>Indefinite.</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’337 Patent at 5:34-6:10, 6:33-40, 6:61-7:9, 7:24-26, 8:9-26, 8:27-42, 9:13-21, 9:44-63, 13:11-32, Figs. 1-9D, 11A, 11B.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’337 Patent at: Field (57); Figs. 3–4; Figs. 6A–B; Figs. 7A–B; Figs. 9A–D; Figs. 10A–B; Figs. 12–15; 1:19–21; 1:32–50; 4:36–5:12; 5:13–46; 5:47–6:10; 6:41–7:9; 7:10–8:8; 8:27–60; 9:6–11:2; 11:3–12:13; 12:14–60; 13:11–14:37; 14:38–15:12; 15:13–62; Claims 1–8; IDT-DWS-001016–56; IDT-DWS-001127–83.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Testimony from Dr. Harri Kytomaa</p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-000929–49; IDT-DWS-000115–468; Noynaert Testimony.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
26	<p><b>“a drilling string”</b></p> <p>(’265 Patent claims 1, and 10)</p>	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary; not indefinite.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>Indefinite.</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’265 Patent at 1:17-19, 1:29-42, 2:33-58, 2:59-3:14, 3:15-20, 4:33-35, 4:42-5:9, 5:51-6:7, Figs. 1-5, 14, 15.</p> <p>’265 Patent prosecution history.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’265 Patent at: Field (57); Figs. 1–15; 1:17–19; 1:29–47; 2:33–7:6; 8:25–15:60; Claims 1, 3, 8–10, 14; IDT-DWS-000191–225; IDT-DWS-000246–270.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Testimony from Dr. Harri Kytomaa</p> <p>Langenkamp, Handbook of Oil Industry Terms &amp; Phrases, 4<sup>th</sup> edition, 1984 “Drillstring” at p. 84</p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351; IDT-DWS-004540–48; IDT-DWS-004528–36; IDT-DWS-004489–95.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
27	“activatable” (’337 Patent claim 1)	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>capable of being provided sufficient flow to cause rotation of the rotor</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’337 Patent at 3:18-35, 3:59-4:12, 6:41-50, 6:53-60, 7:1-9, 9:24-28, 11:6-11, 12:2-3, 12:14-26, 12:27-38, Figs. 2, 4-6, 14, 15.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’337 Patent at: Fig. 2; Figs. 4–5; Figs. 6A–B; Figs. 7A–B; Figs. 8A–B; Figs. 14–15; 3:18–4:12; 4:51–7:9; 7:41–9:5; 9:6–41; 9:42–10:25; 11:33–15:51; Claims 1, 3; IDT-DWS-001016–56; IDT-DWS-001127–83.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-000929–49; IDT-DWS-000115–468.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>



No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
28	<b>“activate”</b>  ('337 Patent claim 1)  ('265 Patent claim 1)	<u><b>Impulse's Proposed Construction:</b></u>  No construction necessary.	<u><b>DWS's Proposed Construction:</b></u>  provide sufficient flow to cause rotation of the rotor
		<u><b>Intrinsic Evidence:</b></u>  '337 Patent at 3:18-35, 3:59-4:12, 9:24-28, 11:6-10, 12:2-3, 12:14-26, 12:27-38, Figs. 2, 4-6, 14, 15;  '265 Patent at Abstract, 3:37-41, 6:50-57, 14:7-17, 14:26-31, 14:43-46, 15:1-10, 15:11- 18, Figs. 2-15.  <u><b>'337 Patent</b></u>  Same citations as “activatable” above.  <u><b>'265 Patent</b></u>  Same citations as “activated” below.	<u><b>Intrinsic Evidence:</b></u>  '337 Patent at: Fig. 2; Figs. 4–5; Figs. 6A–B; Figs. 7A–B; Figs. 8A–B; Figs. 14–15; 3:18–4:12; 4:51– 7:9; 7:41–9:5; 9:6–41; 9:42–10:25; 11:33–15:51; Claims 1, 3; IDT-DWS-001016–56; IDT-DWS-001127–83.  '265 Patent at: Field (57); Figs. 1–15; 3:15–7:6; 7:38–10:39; 11:1–15:49; Claims 1, 3, 6, 10, 11, 13, 14, 17; IDT-DWS-000191–225; IDT-DWS-000246–270.

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
		<p style="text-align: center;"><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p style="text-align: center;"><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277-88; IDT-DWS-002818-3193; IDT-DWS-002106-25; IDT-DWS-001443-2007; IDT-DWS-002719-32; IDT-DWS-002491-691; IDT-DWS-000929-49; IDT-DWS-000115-468.</p> <p>IDT-DWS-003277-88; IDT-DWS-002818-3193; IDT-DWS-002106-25; IDT-DWS-001443-2007; IDT-DWS-002719-32; IDT-DWS-002491-691; IDT-DWS-001409-27; IDT-DWS-000985-1351.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
29	“activating”  (’265 Patent claims 1, and 10)	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>providing sufficient flow to cause rotation of the rotor</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’265 Patent at Abstract, 3:37-41, 6:50-57, 6:58-7:6, 14:7-17, 14:26-31, 14:43-46, 15:1-10, 15:11-18, Figs. 2-15.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’265 Patent at: Field (57); Figs. 1–15; 3:15–7:6; 7:38–10:39; 11:1–15:49; Claims 1, 3, 6, 10, 11, 13, 14, 17; IDT-DWS-000191–225; IDT-DWS-000246–270.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
30	“activated” (’265 Patent claim 10)	<p><b><u>Impulse’s Proposed Construction:</u></b></p> <p>No construction necessary.</p>	<p><b><u>DWS’s Proposed Construction:</u></b></p> <p>having provided sufficient flow to have caused rotation of the rotor</p>
		<p><b><u>Intrinsic Evidence:</u></b></p> <p>’265 Patent at Abstract, 3:37-41, 6:50-57, 6:58-7:6, 14:7-17, 14:26-31, 14:43-46, 15:1-10, 15:11-18, Figs. 2-15.</p>	<p><b><u>Intrinsic Evidence:</u></b></p> <p>’265 Patent at: Field (57); Figs. 1–15; 3:15–7:6; 7:38–10:39; 11:1–15:49; Claims 1, 3, 6, 10, 11, 13, 14, 17; IDT-DWS-000191–225; IDT-DWS-000246–270.</p>
		<p><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277–88; IDT-DWS-002818–3193; IDT-DWS-002106–25; IDT-DWS-001443–2007; IDT-DWS-002719–32; IDT-DWS-002491–691; IDT-DWS-001409–27; IDT-DWS-000985–1351.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
31	<b>“activation tool”</b>  ('337 Patent claim 3) ('265 Patent claims 3, 10, and 17)	<p align="center"><b><u>Impulse's Proposed Construction:</u></b></p> <p>No construction necessary.</p>	<p align="center"><b><u>DWS's Proposed Construction:</u></b></p> <p>projectile catch assembly, which comprises a projectile catch head including one or more bypass ports, a projectile catch seat, and a projectile catch retainer</p>
		<p align="center"><b><u>Intrinsic Evidence:</u></b></p> <p>'337 Patent at 6:24-40, 6:53-60, 7:41-53, 7:54-8:8, 8:9-26, 8:37-42, 8:43-60, 8:61-9:5, 12:27-38, Figs. 1-8B;</p> <p>'265 Patent at Abstract, 4:48-5:9, 5:10-30, 5:31-43, 5:44-6:7, 6:8-37, 6:38-57, 7:38-50, 8:41-9:3, 9:62-10:23, 11:31-12:11, 12:12-58, 12:59-13:8, 13:9-30, 13:31-59, 13:60-14:35, 14:52-15:10, 15:11-49, 15:50-60, Figs. 2, 4, 5, 6A, 8A, 8B, 12, 13.</p>	<p align="center"><b><u>Intrinsic Evidence:</u></b></p> <p>'337 Patent at: Fig. 2; Figs. 4-5; Figs. 6A-B; Figs. 7A-B; Figs. 8A-B; Figs. 14-15; 3:18-4:12; 4:51-7:9; 7:41-9:5; 9:6-41; 9:42-10:25; 11:33-15:51; Claims 1, 3; IDT-DWS-001016-56; IDT-DWS-001127-83.</p> <p>'265 Patent at: Field (57); Figs. 1-15; 3:15-7:6; 7:38-10:39; 11:1-15:49; Claims 1, 3, 6, 10, 11, 13, 14, 17; IDT-DWS-000124-225; IDT-DWS-000246-270; IDT-DWS-000413-30.</p>

No.	CLAIM TERM/PHRASE	IMPULSE'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE	DWS'S PROPOSED CONSTRUCTION AND INTRINSIC AND EXTRINSIC EVIDENCE
		<p style="text-align: center;"><b><u>Extrinsic Evidence:</u></b></p> <p>Reserve the right to address and use any extrinsic evidence put forth by DWS.</p>	<p style="text-align: center;"><b><u>Extrinsic Evidence:</u></b></p> <p>IDT-DWS-003277-88; IDT-DWS-002818-3193; IDT-DWS-002106-25; IDT-DWS-001443-2007; IDT-DWS-002719-32; IDT-DWS-002491-691; IDT-DWS-000929-49; IDT-DWS-000115-468.</p> <p>IDT-DWS-003277-88; IDT-DWS-002818-3193; IDT-DWS-002106-25; IDT-DWS-001443-2007; IDT-DWS-002719-32; IDT-DWS-002491-691; IDT-DWS-001409-27; IDT-DWS-000985-1351.</p> <p>DWS reserves the right to rely on any extrinsic evidence relied upon by Plaintiffs, reserves the right to respond to any expert testimony offered by Plaintiffs, and reserves the right to object to any untimely disclosed extrinsic evidence by Plaintiffs.</p>